



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,625	03/24/2004	Krishna M. Ravi	HES 2003-IP-009511U1	4052
28857 7590 03/01/2007 CRAIG W. RODDY HALLIBURTON ENERGY SERVICES P.O. BOX 1431 DUNCAN, OK 73536-0440			EXAMINER NEUDER, WILLIAM P	
			ART UNIT	PAPER NUMBER
			3672	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/01/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/807,625

Applicant(s)

RAVI, KRISHNA M.

Examiner

William P. Neuder

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a): In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5-9,11-22,26-30,32-43 and 47-61 is/are pending in the application.
- 4a) Of the above claim(s) 12 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-9,11,13-22,26-30,32,34-43 and 47-61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14-20,35-41 and 52-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Gano et al (applied in previous office action).

Gano discloses (figures 1-3) a method of casing a well comprising providing a casing with a sleeve 26 of stress absorbent material coated thereon and surrounding at least a portion of the casing. The stress absorbent material covers a circumferential area of the sleeve along a length of the sleeve. The stress absorbent material comprises fibers. As to claim 15, the casing coating is on an exterior surface of the sleeve. As to claims 16,37 and 53, the coating 48 is on an interior surface. As to claims 17,38 and 55, the casing coating has a thickness of less than 3 inches. As to claims 18,39 and 56, there is no step of coating and these claims actually call for a coated sleeve. How the coating is applied is not material. As to claims 19,40 and 57, the coating comprises fiber and resin (see col. 8, lines 41-45). As to claims 20 and 41, a casing collar 34 is connected to the end of the casing. The casing collar is a hollow cylindrical shaped housing. As to claim 35, Gano discloses a method of reducing transmission of stress from a casing to a cement sheath comprising providing a casing comprising a sleeve 26 having a stress absorbing coating (38,48) surrounding a portion

Art Unit: 3672

of the casing and covering a circumferential area of the sleeve along a length of the sleeve, placing the casing into the well 10 to form an annulus and placing cement 14 into the annulus and allowing the cement composition to set within the annulus to bond the casing to the formation (col. 8, lines 2-4). As to claim 52, Gano discloses a casing comprising a sleeve 26 having a stress absorbent coating 38,48 surrounding a portion of the casing and covering a circumferential area of the sleeve along a length of the sleeve. As to claims 58-61, the casing is to be used in multi-lateral wells. Multi-lateral wells are high stress areas. Therefore, the method comprises determining a high stress area of a formation and placing the casing in the high stress area.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1,5-9,11,13,21,22,26-30,32,34,42,43 and 47-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gano et al (described above).

These claims contain the same limitations as the claims set forth above except to additionally call for the collar to be coated with the stress absorbent material. Gano discloses the casing collar but does not disclose the collar being coated with the stress absorbent material. Gano teaches that the coating provides additional wear resistance (col. 10, lines 19-23). As it would be advantageous to provide additional wear resistant material to all parts of the casing string, it would have been considered obvious to modify Gano to have the casing collar coated to provide additional wear resistance.

Claims 1,5-9,11,13-21,26-30,32,34-43 and 47-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gano et al (applied above) in view of Bol (described in previous office action).

Applicant has amended the independent claims to include (the casing coating covers a circumferential area of the sleeve along a length of the sleeve). While I do not agree that this limitation defines over Gano (as will be addressed in response to arguments), Bol clearly shows placing a casing coating that surrounds the entire circumference of a portion of the sleeve. It would have been considered obvious to replace the casing coatings (38,48) of Gano with the casing coating shape of Bol (one that surrounds the entire circumference) since the coatings are seen to be equivalent parts for performing equivalent functions.

### ***Response to Arguments***

Applicant's arguments filed 1/3/07 have been fully considered but they are not persuasive. First, applicant again argues that Gano does not teach a casing coating. Applicant argues that one would not equate the coating (Gano, col. 10, lines 51-54) of

Art Unit: 3672

Gano to a casing coating. From Webster's, the definition of coating is one substance covering another. Clearly the stress absorbing material of Gano covers the sleeve surface and therefore coats the sleeve. Applicant's other argument is that the helical pattern of Gano does not read on the limitation "the casing coating covers a circumferential area of the sleeve along a length of the sleeve". This is not understood. If we call the length of the sleeve as the area extending between the collars, the material 38,48 covers the circumferential area of the sleeve along this length. Applicant argues that Gano forms a gridwork pattern leaving exposed areas. While this is true, the limitation circumferential area does not preclude a reading of there being open areas. However, in order to try and further prosecution, the rejection of Gano in view of Bol has been given in that to form the coating of Gano as a coating surrounding the entire circumference without leaving any open areas has been given.

This application contains claims 12 and 33 drawn to an invention non-elected with traverse in Paper No. 4/17/06.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

Art Unit: 3672

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Neuder whose telephone number is 571-272-7032. The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



William P Neuder  
Primary Examiner  
Art Unit 3672